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Abstract

The object of the present invention is to greatly improve PDPs in luminance and luminous efficiency, compared to conventional PDPs.

In order to achieve the object, the panel structure is set such that an equivalent field strength of at least 37V/cm·KPa is generated in selected discharge spaces in which the electric charge has been accumulated on their dielectric layer, when a discharge sustaining voltage is applied between a pair of display electrodes.

To achieve such a high equivalent field strength as 37V/cm·KPa, adequate setting of the following factors of the panel structure is effective: a gap between a pair of display electrodes, a thickness and a permittivity of a dielectric layer, and an amount of Xe filled in discharge spaces.